

## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

REGION | 5 POST OFFICE SQUARE, SUITE 100 BOSTON, MASSACHUSETTS 02109-3912

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

February 21, 2012

Mr. Bill Wessel Smith and Wessel Associates, Inc 8 Church Street Merrimac, Massachusetts 01860

Re:

Notification for Removal of Polychlorinated Biphenyls in Caulking

Leominster High School, Leominster, Massachusetts

Dear Mr. Wessel:

Smith and Wessel Associates, Inc. submitted a revised Work Plan for Removal of Polychlorinated Biphenyls in Caulking (a revised Notification under § 761.61(a)) and Response to EPA comments dated February 10, 2012 to address PCB contaminated building materials at Leominster High School located at 122 Granite Street, Leominster, Massachusetts (the Site), on behalf of the City of Leominster Public Schools.

We have reviewed the February 10, 2012 revised SIP and the Response to EPA Comments and have the following additional questions/comments on these submittals:

- EPA Comment #10 (page 4). EPA requested information about black window caulk found in the 1990 CTE Building. The response was that additional samples of the caulk were being collected. When will the results be available? How will this caulk be addressed if it is found to have PCBs > 1 ppm?
- Revised SIP. Page 11, Table 5. The results of the pilot tests for various types of encapsulants were provided. Based on the Response to EPA comments, two (2) coats of encapsulant were used for each test. Based on the results of the pilot tests, PCB concentrations were > 1 μg/100 cm² for all encapsulants.

Thus, given that a 1  $\mu$ g/100 cm<sup>2</sup> PCB action level will be used for determining the effectiveness of the encapsulation process, it does not appear that any of the pilot test encapsulants met this requirement. With exception of the caulk joint which will have 3 coatings (versus 2), it does not appear that any substantive changes to the encapsulation plan were made based on the results of the pilot tests. Was any testing done to confirm

the adequacy of 3 coatings for the joints? If not, please clarify what contingencies will be put in place if the results of the post-encapsulation surface wipe results are  $> 1 \mu g/100 \text{ cm}^2$ .

3. Revised SIP. Page 15 Table 6. 40 CFR 761 specifies that verification sampling be conducted in accordance with Subpart O, using a 5 foot by 5 foot grid to identify the placement of samples. The use of an area-type measurement is not particularly useful for determining sampling along linear features, such as a caulk joint. Thus, the adequacy of the proposed post-abatement sampling (for both encapsulated and decontaminated surfaces) based on square footage is difficult to determine.

Therefore, EPA recommends that sample placement be evaluated and justified based on the linear feet of caulk present for each matrix (e.g., concrete block, brick, metal beams /columns). From that point the number of recommended samples should be added as a separate column. An example table is provided for your consideration:

Location	Material	Est. Caulk Seam Qty (LF)	Est Quantity of Encapsulated Surface or Decontaminated Surface (square feet ft²)	Number of Verification Samples (1)
E Wing  Corridors C to E	Caulking at structural columns and expansion joints abutting concrete	1000	Concrete: 14,700 ft <sup>2</sup>	10 concrete wipes (1 every 100 LF caulk removed)
			Structural columns (metal) 250 ft <sup>2</sup>	5 metal wipes (1 every 50 LF)
Corridors	Caulking at doors abutting concrete	50	Concrete: 25 ft <sup>2</sup>	2 concrete wipes (1 every 25 LF)
			Doors (metal): 50 LF	2 door wipes (1 every 25 LF)
Corridors	Caulking at expansion joints abutting glazed tile	500	Concrete: 250 ft <sup>2</sup>	5 wipes (1 every 50 LF)
			Glazed Tile: 250 ft <sup>2</sup>	5 wipes (1 every 50 LF)

Concrete wipes are to be collected following encapsulation to confirm the effectiveness of the coatings at a < 1 μg/100 cm<sup>2</sup> PCB action level. Structural column, glazed tile, and metal door wipes samples to be collected following decontamination to confirm < 1 μg/100 cm<sup>2</sup> PCB cleanup standard has been achieved.

4. Revised SIP. Page 21, Section 5.4. The Notification indicates that post removal random soil samples will be collected every 100 linear feet. Please clarify the number of proposed verification samples. Given that Subpart O specifies 5-foot intervals for verification sampling, EPA must approve a sampling frequency deviation pursuant to § 761.61(c). Thus, please provide a justification to support the proposed 100-foot verification sampling frequency deviation.

Should you have any questions regarding the above or questions on the PCB regulations found at 40 CFR Part 761, please feel free to call me at (617) 918-1527 or Katherine Woodward at (617) 918-1353.

Singerely,

Kimberly N. Tisa, PCB Coordinator (OSRR07-2)

Remediation & Restoration II Branch

Cc: R. Marks, Daedalus

MassDEP, Central Region

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